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Fw: Lab report for barn owl loss in San Bernardino County
Robert Miller to: Norman Spurling

12/03/2012 07:01 AM

From: Robert Miller/DC/USEPA/US
To: Norman Spurling/DC/USEPA/US@EPA

Norm,

Below is a new rodenticide incident.

Bob

----- Forwarded by Robert Miller/DC/USEPA/US on 12/03/2012 07:00 AM -----

From: Stella McMillin <SMCMILLIN@dfg.ca.gov>
To: <alampman@awm.sbcounty.gov>, Debbie Daniels <ddaniels@cdpr.ca.gov>, <JMARTIN@cdpr.ca.gov>, Richard Bireley <rbireley@cdpr.ca.gov>, Kyle Chang <KCHANG@dfg.ca.gov>, Robert Miller/DC/USEPA/US@EPA
Date: 11/30/2012 07:18 PM
Subject: Lab report for barn owl loss in San Bernardino County

Hello, Please see attached lab report. If you have any questions or need a hard copy, please let me know.

Thank you.

Stella

Stella McMillin
California Department of Fish and Game
Wildlife Investigations Laboratory
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(916) 358-2954 P2671.pdf



DEPARTMENT OF FISH AND GAME
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WILDLIFE INVESTIGATIONS LABORATORY
PESTICIDE INVESTIGATIONS
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PHONE (916) 358-2954

Lab No: P-2671
WPCL No.

Date: October 20, 2012
Sample: Barn owl
Listing Status: no special status

To: Warden Kyle Chang
Southern Enforcement District

Report Date: November 30, 2012

Remarks

Loss of barn owls in San Bernardino County in association with rodent control at poultry operation.

Background

On October 30, 2012, DFG Enforcement staff responded to a report of a loss of four barn owls, *Tyto alba*, and at least one hawk (unknown species) near a poultry operation in Phelan in San Bernardino County. The poultry operation had been using Rampage (active ingredient: bromethalin) and Tempo (active ingredient: cyfluthrin) to control vertebrate and invertebrate pests. The San Bernardino County Agricultural Commissioner's Office had inspected the site and saw no signs of improper pesticide use. A barn owl was collected by DFG and shipped to DFG Wildlife Investigations Laboratory for analysis. This owl was too dessicated to yield tissue samples. Another barn owl was retrieved by a neighbor on October 30 and was shipped and found to be in good condition for examination. The neighbor reported that an additional two barn owls were observed dead on the site.

RESULTS OF EXAMINATION

The barn owl was examined at WIL on November 7. There was a puncture wound on the right wing causing swelling and bleeding around the humerus. The owl was a male with good abdominal fat and no apparent internal bleeding. Both the crop and proventriculus were empty.

Liver tissue and brain tissue were extracted and submitted to the California Animal Health and Food Safety Laboratory at UC Davis for anticoagulant rodenticide and bromethalin analysis, respectively.

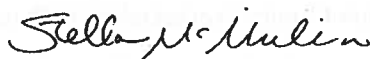
No bromethalin was detected in the brain tissue (>0.05 ppm). Four anticoagulant rodenticides were detected in the liver (Table 1).

Table 1. Concentration of Anticoagulant Rodenticides in Liver of Barn Owl

Analyte	Concentration (ppm, wet weight)	Reporting limit (ppm, wet weight)
Brodifacoum	0.060	0.01
Bromadiolone	0.40	0.05
Chlorophacinone	ND	0.25
Coumachlor	Trace	0.05
Difethialone	ND	0.25
Diphacinone	Trace	0.25
Warfarin	ND	0.05

Anticoagulant rodenticides are commonly found in predatory and scavenging wildlife as a result of secondary exposure. Diagnosis of anticoagulant rodenticide toxicosis is dependent upon presence of anticoagulant rodenticides in the liver as well as evidence of abnormal bleeding in the carcass. As there was no such abnormal bleeding, it is not possible to determine whether anticoagulant exposure was a factor in the owl loss. Coumachlor is not registered for use in the United States.

WILDLIFE INVESTIGATIONS LABORATORY



Stella McMillin
Environmental Scientist

Approved



Steve Torres, Program Manager,
Wildlife Investigations Laboratory

Cc: Allen Lampman,
San Bernardino Agricultural Commissioner's Office

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Robert Miller,
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